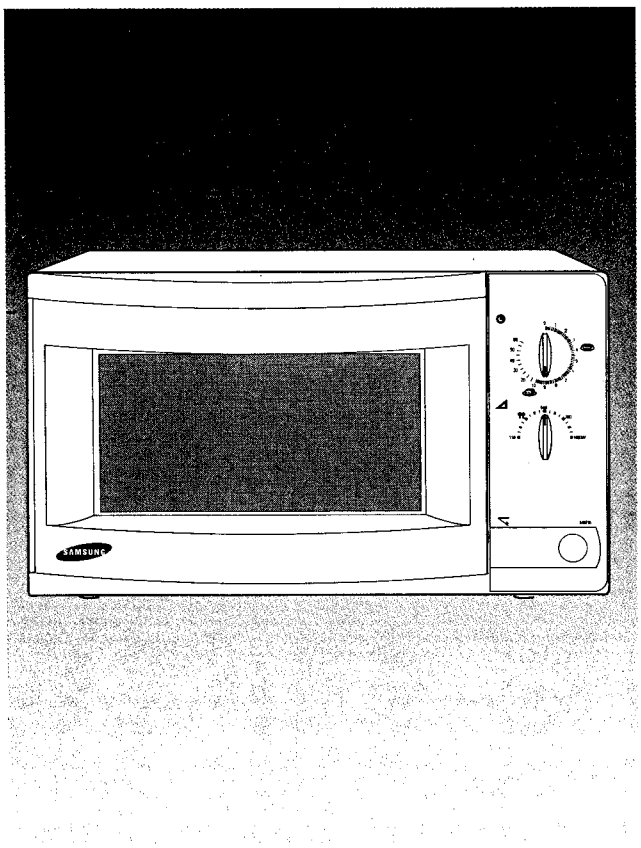
SAMSUNG

MICROWAVE OVEN
M9235

SERVICE Manual

MICROWAVE OVEN



SET

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C.T.EUROPE

1. PRECAUTION

1-1. Safety Precaution (!)

1) Pacemaker wearers must consult their physician before attempting to service or repair a microwave oven. For additional advice on this subject, write to the manufacturer of your pacemaker.
2) The product should be serviced only by qualified personnel.
3) Though the product has been manufactured in compliance with the Federal performance Standard 21 CFR Subchapter J(DHHS), it is very important when servicing to avoid being exposed to excessive microwave radiation. All the repairs should be performed in accordance with the procedures described in this manual.
4) Use only the iidentical parts as listed in the parts list of this manual in order to comply with the Federal performance Standard 21 CFR . Subchapter J(DHHS).
5) In the event of suspected imcrowave energy leakage in excess of 5mW/cm2, please notify;
   CENTRAL SERVICE CENTER
6) Repair microwave oven at no charge to the owner for excessive microwave emission levle.
7) Ascertain the cause of the excessive leakage and instruct the owner not to use the unit until the oven has been brought into compliance.
8) If the oven is operated with the door open, please advise the owner not to use the oven and contact the manufacturer and CDRH immediately.
9) There are special components used in the microwave oven which are important for safety. These parts are marked with a on the replacement parts list. It is essential that these critical parts should be replaced only whith the manufacture's specified parts to prevent microwave leakage, shock, fire, or other hazards. Do not modify the original design.

1-2. Servicing Precaution (☞)

PRECAUTIONS TO BE OBSERVED BEFORE AND DURING SERVICING TO AVOID OPOSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY

1. Do not attempt to operate the oven or allow it to be operated with the door open.
2. Make the following safety checks on all ovens to be serviced before activating the magnetron or other microwave source, and then make repairs as necessary:
   (A) Interlock operation
   (B) Proper door closing
   (C) Seal and sealing surfaces (arcing, wear, or other damages)
   (D) Damage to or loosening of hinges and latches
   (E) Evidence of dropping or abuse.
3. Before turning on the microwave power for any service test or inspection within the microwave generating compartments, check the magnetron, wave guide or transmission line, and cavity for proper alignment, integrity and connections.
4. Any defective or misadjusted components in the interlock, monitor, door seal, and microwave generation and transmission systems shall be repaired or adjusted by procedures described in this manual before releasing the oven to the owner.
5. A microwave leakage check should be performed on each oven prior to releasing to the owner.

2. SPECIFICATIONS

SPECIFICATIONS

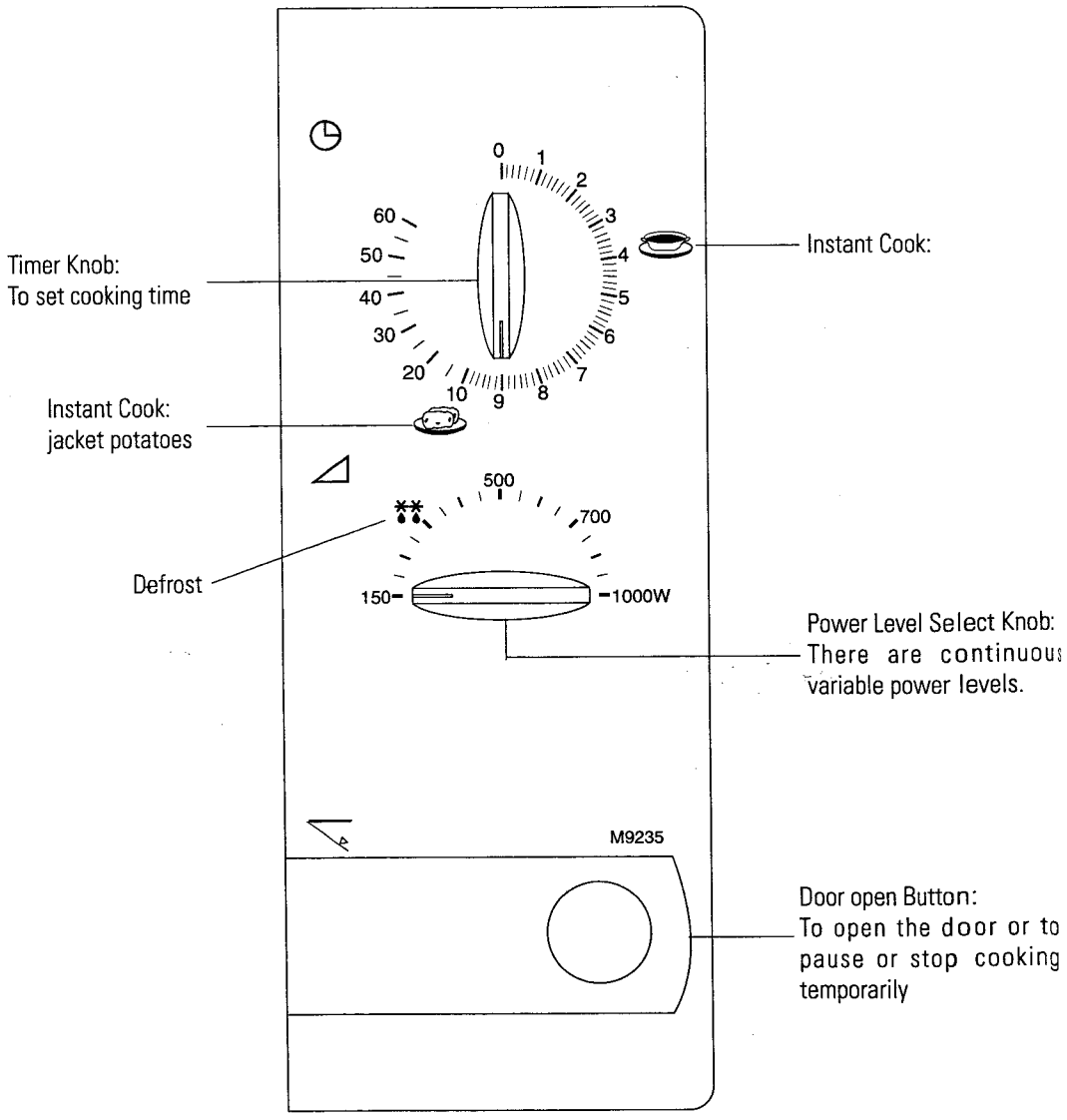
TIMER	60 MINUTES
POWER SOURCE	230V 50Hz, AC
POWER CONSUMPTION	MICROWAVE : 1,650W
OUTPUT POWER	150W/1000W (IEC-705 TEST PROCEDURE)
OPERATING FREQUENCY	2,450MHz
MAGNETRON	OM75P(31)
COOLING METHOD	COOLING FAN MOTOR
OUTSIDE DIMENSIONS	520(W) x 315(H) x 375(D)

POWER LEVEL		ON TIME	OFF TIME
15%	150W	5 sec	25 sec
30%	300W	10 sec	20 sec
50%	500W	16 sec	14 sec
70%	700W	22 sec	8 sec
100%	1000W	30 sec	0 sec

3. COMPARING CHART

FEATURE \ MODEL	M9235
MORE/LESS	X
AUTO COOK/DISH	X
AUTO DEFROST	X
TIME COOK	O
POWER LEVEL	O
INSTANT COOK	O
MEMORY	X
BOOST	X
CHILD LOCK	X
CLOCK	X

4. CONTROL PANEL



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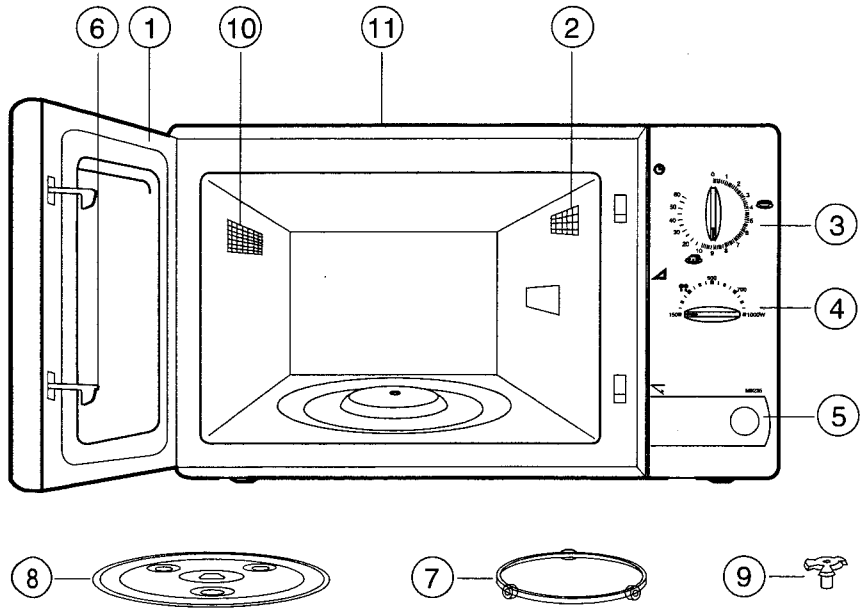
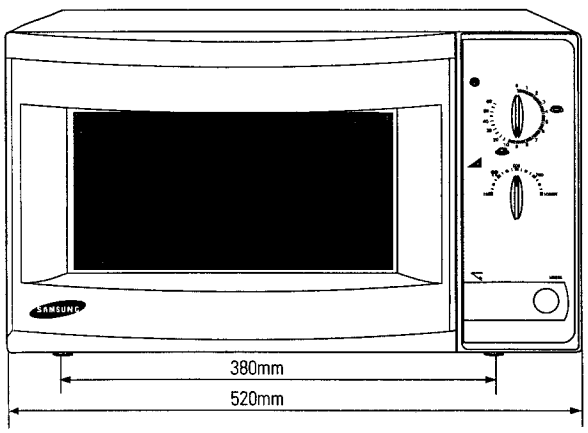
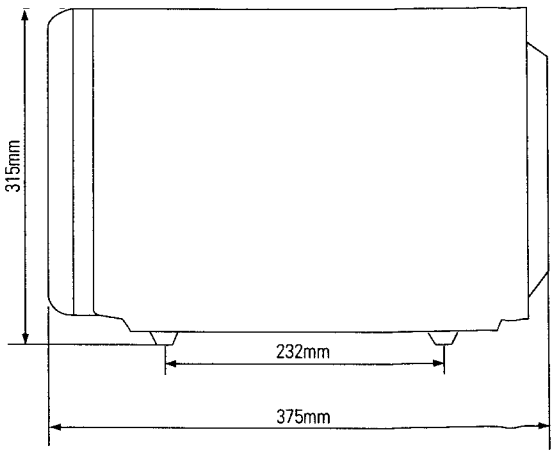
5. FEATURES & EXTERNAL VIEWS



1. Oven Door (to view food being cooked)
2. Interior Oven Lamp
3. Time Knob
4. Power Control Knob
5. Door Open Button
6. Door latches and safety interlock
7. Guide Roller
8. Cooking Tray
9. coupler
10. Ventilation Openings
11. Model No. & Serial No.

FEATURES





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6.0PERATION INSTRUOCTION

Adjusting the Cooking Time During Cooking

Stopping the Cooking

Temporarily: Open Door.
To resume cooking, close the door.
Completely: Turn the TIMER knob to '0'

Adding Extra Time

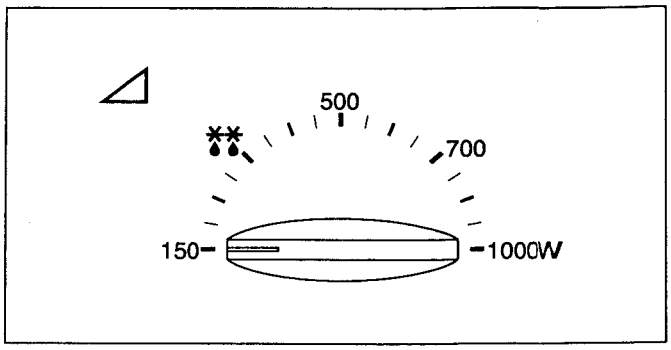
Simply move the timer knob to any increased setting that you require.

Manual Defrosting Food

1. Place the frozen food in the oven and close the door.
2. Turn the COOKING POWER CONTROL knob to Defrost symbol.
3. Turn the TIMER knob to select the appropriate time.

Result: Defrpstomg begoms.
When defrosting has finished, the oven beeps.

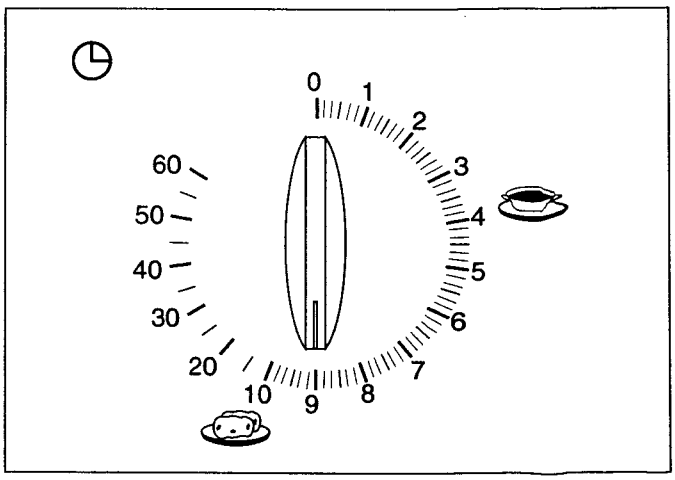
POWER CONTROL KNOB



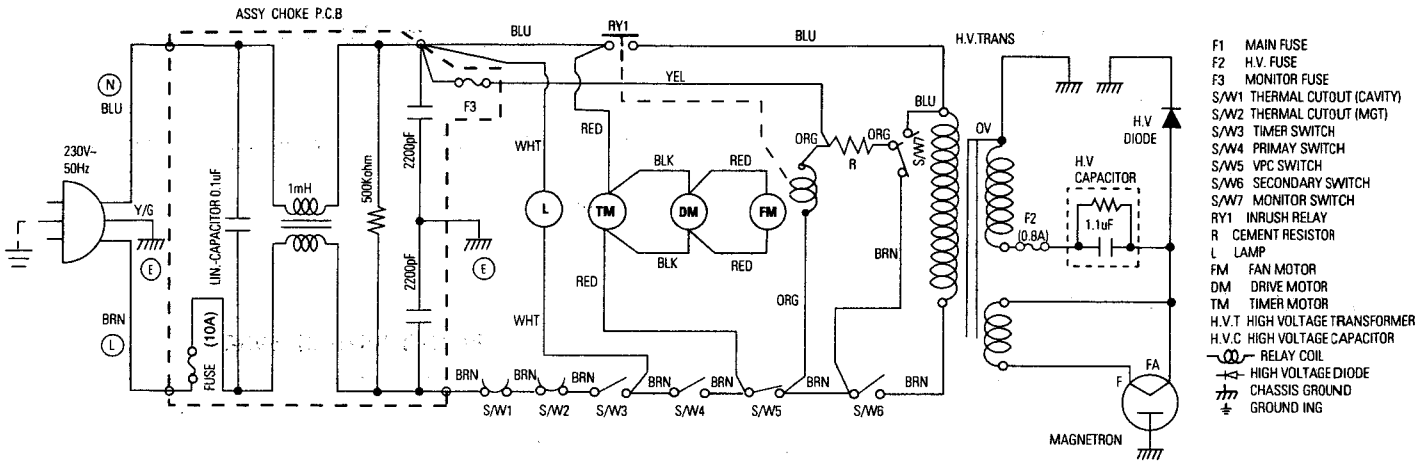
Instant Cook Guide

1. Place the food in the oven and colse the door.
2. Turn the COOKING POWER CONTROL knob to Max Power (100%)
3. Turn the TIMER knob to select instant cook, soup/sauce or Jacket potatoes.

TIMER KNOB

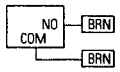


7. WIRING DIAGRAM

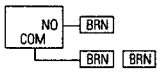


CONDITION OF OVEN
DOOR IS OPENED COOK OFF

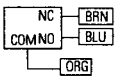
WIRING	COLOR
BRN	BROWN
BLU	BLUE
WHT	WHITE
ORG	ORANGE
RED.	RED
YEL	YELLOW
BLK	BLACK
Y/G	YELLOW/ GREEN



PRIMARY LATCH SWITCH

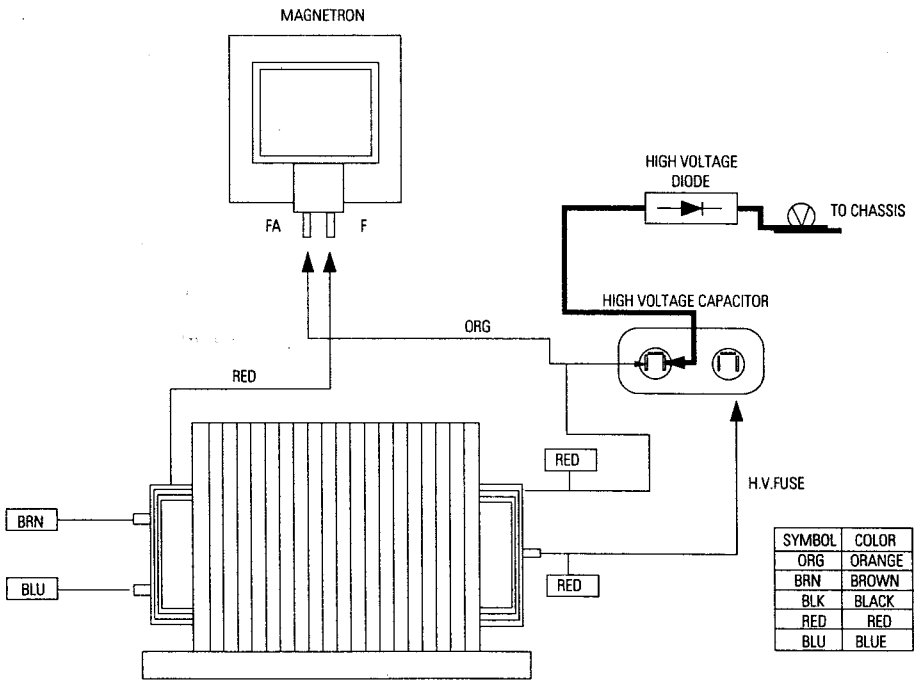


SECONDARY LATCH SWIT CH



MONITOR SWITCH

W/D



SYMBOL	COLOR
ORG	ORANGE
BRN	BROWN
BLK	BLACK
RED	RED
BLU	BLUE

W/D-1

8. CAUTIONS OBSERVED WHEN SERVICING

Unlike many other appliances, the microwave oven is high-voltage, high current equipment. Though it is free from danger in ordinary use, extreme care should be taken during repair.

PRECAUTION

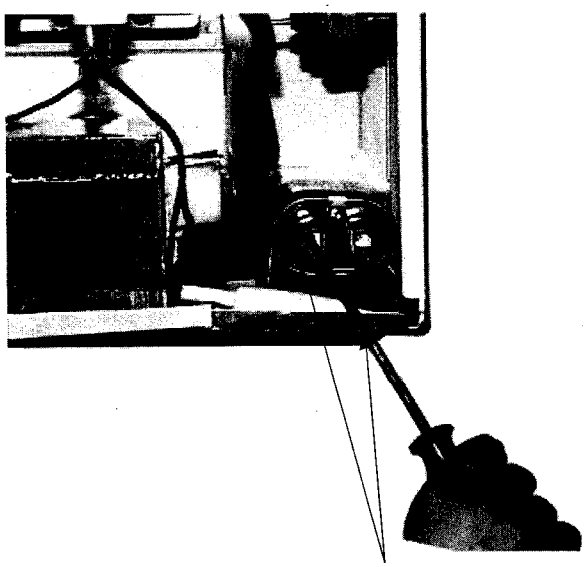
Servicemen should remove their watches whenever working close to or replacing the magnetron.

8-1. Check the ground.

Do not operate on a 2-wire extension cord. The microwave oven is designed to be used when grounded. It is imperative, therefore, to make sure that the oven should be grounded prior to repair.

8-2. Warning about the electric charge in the high voltage capacitor

As an electric charge in the high voltage capacitor remains for about 30 seconds after operation stops, short the current between the oven chassis and the negative terminal of the high voltage capacitor, by using a screwdriver before replacing or checking parts.



☞ : Touch chassis side first then short to the high voltage capacitor terminal by using a screwdriver or jumper wire.

8-3. When parts must be replaced, remove the power plug from the outlet

8-4. When the 1.6 Amp fuse is blown out by the operation of the interlock Monitor switch:

(A) Replace the primary, door sensing and interlock monitor switches. This is mandatory. Refer to page 10 for the necessary adjustments of these switches.

(B) When replacing the fuse, confirm that it has the appropriate rating for this model.

8-5. Avoid inserting any foreign materials, etc. through any hole in the unit during operation.

Never insert any foreign materials or any other metal object through the lamp hole on the cavity or any other holes or gaps, because such objects may work as an antenna and cause microwave leakage.

8-6. Confirm after repair:

(A) After repair or replacement of parts, make sure that screws of the oven are neither loose nor missing; to prevent the microwave leakage.

(B) Make sure that all electrical connections are tight before inserting the plug in to the wall outlet.

(C) Check for radiation leakage. (Refer to the procedure for measuring energy leakage in page 11.)

PRECAUTION

There exists HIGH VOLTAGE ELECTRICITY with high current capabilities in the circuits of the HIGH VOLTAGE TRANSFORMER secondary and filament terminals. It is extremely dangerous to work on or near these circuits with the oven energized.

DO NOT measure the voltage in the high voltage circuit including filament voltage of magnetron.

PRECAUTION

Never touch any circuit wiring with your hand nor with an insulated tool during operation.

9. CIRCUIT DESCRIPTIONS

Refer to the wiring diagram on page 6.

1. When the food is placed inside the oven and the door is closed

When the power cord is plugged in, the oven lamp remains unlit. The interlock monitor switch is opened. This interlock monitor switch acts to blow the main fuse or monitor fuse and stop magnetron oscillation when the door is opened during operation under an abnormal condition.

2. When cooking cycle is ready, power and time can be set by rotating the corresponding knob.

(A) Select the power level by rotating the variable power control knob.

(B) Set the cooking time by rotating the timer knob.

3. When the door is closed and the cooking time is set.

(A) The oven lamp turns on.

(B) The primary interlock switch and secondary interlock switch are closed.

(C) The fan motor rotates and cools the magnetron by blowing the air coming from the intake on the back panel over the magnetron fins, this air is directed into the oven to blow out the vapor. Rotation speed of the drive motor is around 3rpm. The drive motor ratates to move the tray for uniform cooking.

(D) 230V/50Hz AC is applied to the high voltage transformer through the contacts of primary and secondary switches shown by the solid line (Fig. 1).

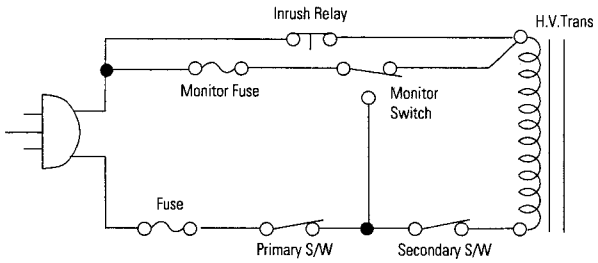


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Fig. 1

(E) 3.4 vlots AC is generated from the filament winding of the high voltage transformer. This 3.4volts is applied to the magnetron to heat the magnetron filament through two noise preventing choke coils.

(F) A high voltage of 2,230 volts AC is generated in the secondary of the high voltage transformer and this secondary voltage is increased by the rectifying action of the diode and the charging of the high voltage capacitor. This resultant D.C voltage is then applied to the anode of the magnetron. As shown in Fig. 2, the first half cycle of the high voltage porduced in the high voltage transformer secondary charges the high voltage capacitor. Current flow is in the direction of the dotted-line. During the second half cycle, the voltage produced by the transformer.secondary and the charge of high voltage capacitor are combined and applied to the magnetron as shown by the solid line so that oscillations begin. The interference signals generated by the magnetron could badly interfere with radio and television broadcasts during normal operation. This problem is resolved by careful shielding around the magnetron, and the inclusion of 1.6uH chckes and 500pF filter capacitors.

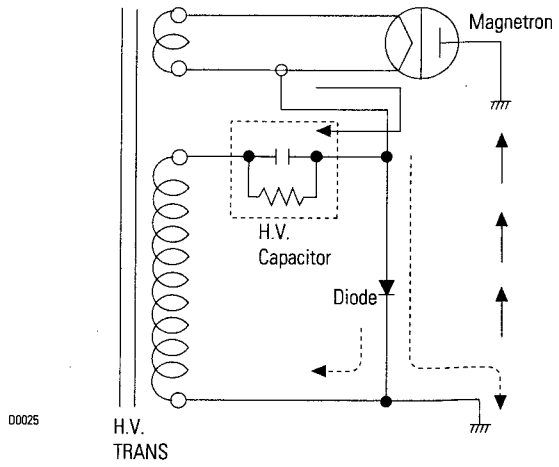

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Fig. 2

(G) When the oven is set at any power level other than full, the timer motor controls the ON-OFF time of variable power switch in order to vary the output power. One complete on and off cycle of the variable power switch is 30 seconds.

4. When the door is opened during cooking

(A) The primary switch and secondary switch are opened to cut off the primary voltage of the high voltage transformer to stop microwave oscillation, also the fan motor and drive motor are turned off, but the oven lamp lights until the timer is turned off.

(B) As soon as the door is opened, the contacts of secondary switch and primary switch are opened and the interlock monitor switch is closed short circuiting the unpowered AC line.

(C) If the contacts of primary interlock switch malfunction, the main fuse blows due to the large current surge caused by the short switch activation. Then the magnetron oscillation stops. (Fig. 3)

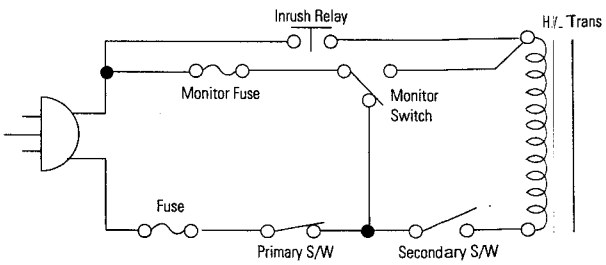

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Fig. 3

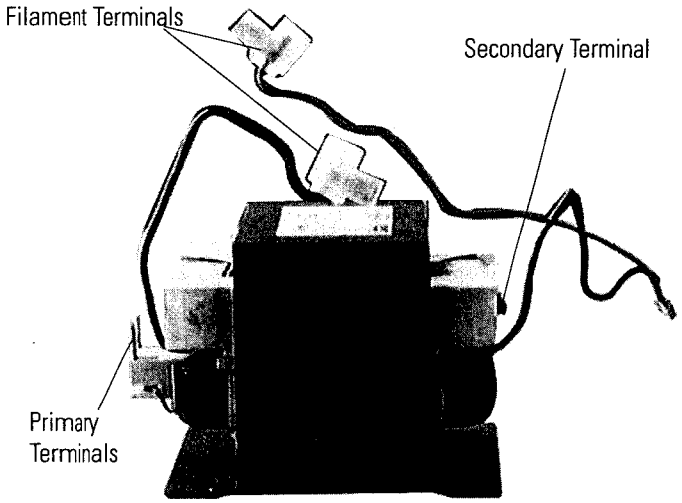
10. COMPONENT TEST PROCEDURE

PRECAUTION

1. High voltage is present at the high voltage terminal of the high voltage transformer during any cook cycle.
2. It is neither necessary nor advisable to attempt measurement of the high voltage.
3. Before touching any oven components, or wiring, always unplug the oven from its power source and discharge the high voltage capacitor.

10-1. High Voltage Transformer

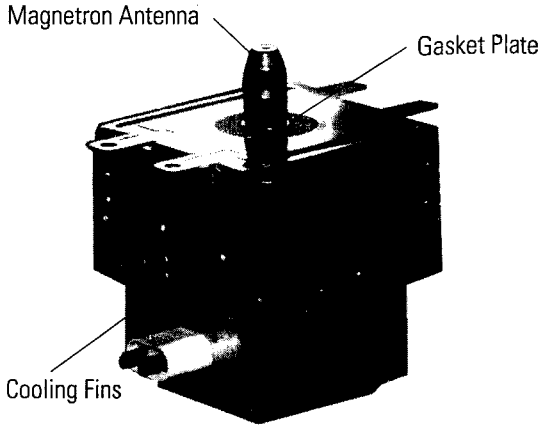
1) Remove connectors from the transformer terminals and check continuity.
2) Normal resistance readings should be as follows:
   Secondary.....Approx. 94Ω
   Filament.....Approx. 0Ω
   Primary.....Approx. 1.6Ω
   (Room temperature = 20°C)



10-2. Magnetron

Continuity checks can only indicate an open filament or a shorted magnetron. To diagnose an open filament or shorted magnetron;

1) Isolate the magnetron from the circuit by disconnecting its leads.
2) A continuity check across the magnetron filament terminals should indicate one ohm or less.
3) A continuity check between each filament terminal and magnetron case should read open.



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10-3. High Voltage Capacitor

1) Check continuity of the capacitor with meter set at the highest ohm scale.
2) Once the capacitor is charged, a normal capacitor shows continuity for a short time, and then indicates 9MΩ.
3) A shorted capacitor will show continuous continuity.
4) An open capacitor will show constant 9MΩ.
5) Resistance between each terminal and chassis should read infinite.

10-4. High Voltage Diode

1) Isolate the diode from the circuit by disconnecting its leads.
2) With the ohm-meter set at the highest resistance scale, measure the resistance across the diode terminals. Reverse the meter leads and read the resistance. A meter with 6V,9V or higher voltage batteries should be used to check the front-to back resistance of the diode, otherwise an infinite resistance may be read in both directions. The resistance of a normal diode will be infinite in one direction and several hundred KΩ in the other direction.

11. MEASUREMENTS & ADJUSTMENTS

Precaution

For continued protection against radiation hazard, replace parts in accordance with the wiring diagram and be sure to use the correct part number for the following switches.: Primary and secondary interlock switches and the interlock monitor switch all together. Then follow the adjustment procedures below. After repair and adjustment, be sure to check the continuity of all interlock switches and the interlock monitor switch.

11-1. Adjustment of Primary Switch, Door Sensing Switch and Monitor Switch

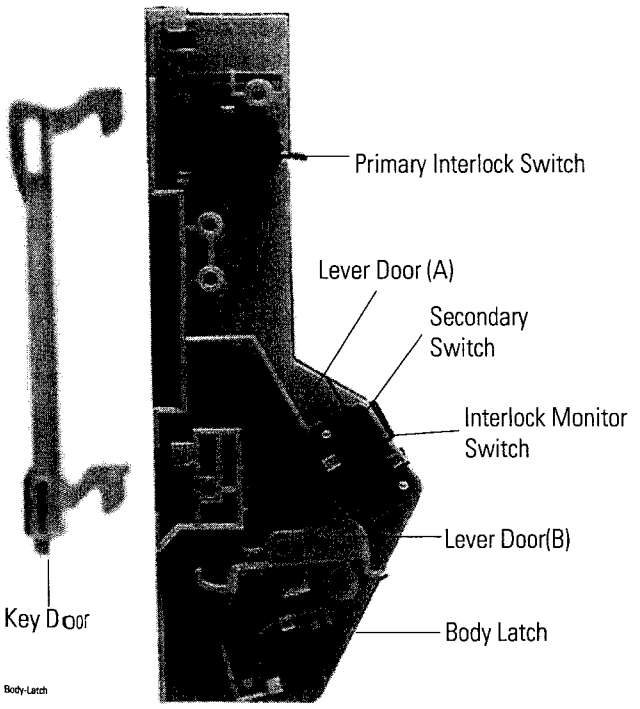
1) When mounting Primary switch and interlock Monitor switch to Latch Body, consult the figure below.

NOTE: No specific adjustment during installation of Primary switch and Monitor switch to the latch body is necessary.

2) When mounting the Latch Body to the oven assembly, adjust to the Latch Body by moving it so that the oven door will not have any play in it. Check for play in the door by pulling the door assembly. Make sure that the latch keys move smoothly after adjustment is completed. Completely tighten the screws holding the Latch Body to the oven assembly.

3) Reconnect to Monitor switch and check the continuity of the monitor circuit and all latch switches again by following the components test procedures.
Please confirm that the gap between the switch housing and the switch actuator is no more than 0.5mm when door is closed.

	Door Open	Door Closed
Primary switch	∞	0
Monitor switch (COM-NC)	0	∞
Monitor switch (COM-NO)	∞	0
Secondary switch	∞	0



11-2. Output Power of Magnetron

The output power of the magnetron can be simply measured by performing a water temperature rise test.

Equipment needed for the test:

* Two 1-liter cylindrical borosilicate glass vessel (Outside diameter of 190mm)
* One glass thermometer with mercury column

NOTE: Check line voltage under load. Low voltage will lower the magnetron output. Make all temperature and time tests with accurate equipment.

(A) Fill the one liter glass vessel with one liter of water.

(B) Stir water in glass vessel with thermometer and record glass vessel's temperature as T1. (10±1°C)

(C) After moving the water into another glass vessel, place it on the center of the cooking tray. Set the oven to high power and operate for 44 seconds exactly. (2 seconds included as a holding time of magnetron oscillation)

(D) When heating is finished, stir the water again with the thermometer and measure the temperature rise as T2.

(E) Subtract R1 from T2. This will give you the water temperature rise. (ΔT)

(F) The output power is obtained by the following formula;

$$\text{Output Power} = \frac{4.187 \times 1000 \times \Delta T}{42}$$

44 : Heating Time (sec)
4.187 : Coefficient for Water
1000 : Water (cc)
ΔT : Temperature Rise (T2-T1)

*** Output (W) = 100 x ΔT**

(F) Normal temperature rise for this model is 9°C to 11°C at 'HIGH'.

NOTE 1: Variations or errors in the test procedure will cause a variance in the temperature rise. Additional power test should be made if temperature rise is marginal.

NOTE 2: Output power in watts is computed by multiplying the temperature rise (step E) by a power factor of 91 in case of centigrade temperature.

11-3. Microwave Heat Distribution - Heat Evenness

The microwave heat distribution can be checked by indirectly measuring the water temperature rises at certain positions in the oven as directed below.

(1) Prepare five beakers made of 'Pyrex', having 100 milliliters capacity each.

(B) Measure exactly 100milliliters off water load with a measuring cylinder and pour it into each beaker.

(C) Measure the temperature of each water load.
(Readings shall be taken to the first place of decimals.)

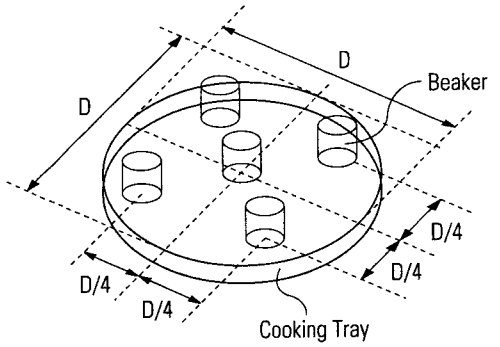
(D) Put each beaker in place on the cooking tray as illustrated in Figure below and start heating.

(E) After heating for 2 minutes, measure the temperatures of water in each beaker.

(F) Microwave heat distribution rate can be obtained by the following formula.

$$\text{Heat Distribution} = \frac{\text{Minimum Temperature Rise}}{\text{Maximum Temperature Rise}} \times 100(\%)$$

The result should exceed 65%.



CAUTION
MICROWAVE RADIATION

PERSONNEL SHOULD NOT BECOME EXPOSED TO MICROWAVE RADIATION FROM MICROWAVE GENERATOR OR OTHER PARTS CONDUCTING MICROWAVE ENERGY.

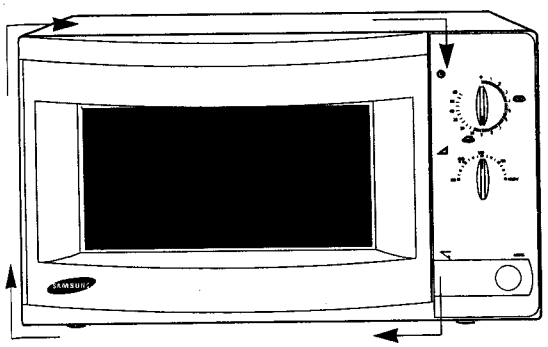
12. LEAKAGE MEASURING PROCEDURE

12-1. Equipment

* Microwave Energy Survey Meter
* 600cc glass beaker
* Mercurial or digital thermometer 100°C or 212°F

12-2. Procedure for Measurement of Microwave Energy Leakage

1) Pour 275±15cc of 20±5°C (68±9°F) water in a beaker which is graduated to 600cc, and place the beaker in the center of the oven.
2) Start to operate the oven and measure the leakage by using a microwave energy survey meter.
3) Set survey meter with dual ranges to 2,450MHz.
4) When measuring the leakage, always use the 2 inch spacer cone with the probe. Hold the probe perpendicular to the cabinet door. Place the spacer cone of the probe on the door and/or cabinet door seam and move along the seam, the door viewing window and the exhaust openings moving the probe in clockwise direction at a rate of 1 inch/sec. If the leakage testing of the cabinet door seam is taken near a corner of the door, keep the probe perpendicular to the areas making sure that the probe end at the base of the cone does not get closer than 2 inches to any metal. If it gets closer than 2 inches, erroneous readings may result.
5) Measured leakage must be less than 5mW/cm^2, after repair or adjustment.



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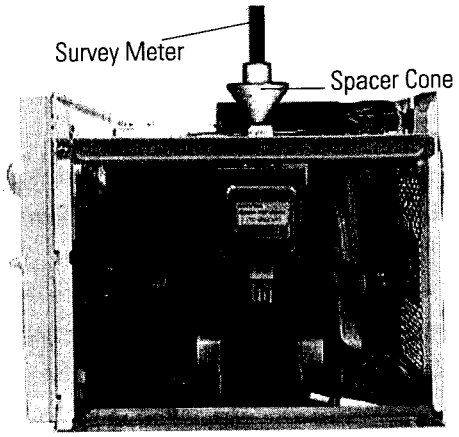
12-3. Check for Microwave Energy Leakage with Outer Panel Removed.

1) Remove the outer panel.
2) Pour 275±15cc of 20±5°C(68±9°F) water in a beaker which is graduated to 600cc, and place the beaker in the center of the oven.
3) Start to operate the oven at the highest power level.
4) Set survey meter with dual ranges to 2,450MHz.
5) By using the survey meter and spacer cone as described above, measure around the opening area of magnetron, the surface of the air guide and the surface of the wave guide as shown in the following photo but avoid the high voltage components. The meter should read less than 5mW/cm^2.

12-4. Note on Measurement

1) Do not exceed the limited scale.



WARNING

AVOID THE HIGH VOLTAGE COMPONENTS.

2) The test probe must be held on the grip of the handle, otherwise a false reading may result when the operator's hand is between the handle and the probe.
3) When high leakage is suspected, do not move the probe horizontally along the oven surface; this may cause damage to the probe.
4) Follow the recommendation of the manufacturer of the microwave energy survey meter.

12-5. Record keeping and notification after measurement

1) After adjustment and repair of a radiation preventing device, make a repair record for the measured values, and keep the data.
2) If the radiation leakage is more than 5mW/cm^2 after determining that all parts are in good condition, functioning properly and the identical parts are replaced as listed in this manual, notify that fact to;
CENTRAL SERVICE CENTER

12-6. At least once a year have the Microwave Energy Survey Meter checked for accuracy by its manufacturer.

13. Troubleshooting

PRECAUTION

1. CHECK GROUNDING BEFORE CHECKING FOR TROUBLE.
2. BE CAREFUL OF THE HIGH VOLTAGE CIRCUIT.
3. DISCHARGE THE HIGH VOLTAGE CAPACITOR.
4. WHEN CHECKING THE CONTINUITY OF THE SWITCHES OR TRANSFORMER, DISCONNECT ONE LEAD WIRE FROM THESE PARTS AND THEN CHECK CONTINUITY WITHOUT THE POWER SOURCE ON. TO DO OTHERWISE MAY RESULT IN A FALSE READING OR A DAMAGE TO YOUR METER.
5. DO NOT TOUCH ANY PART OF THE CIRCUIT OR THE TOUCH CONTROL CIRCUIT BOARD, SINCE STATIC ELECTRIC DISCHARGE MAY DAMAGE THIS CONTROL PANEL. ALWAYS TOUCH GROUND WHILE WORKING ON THIS TO DISCHARGE ANY STATIC CHARGE BUILT UP IN YOUR BODY.

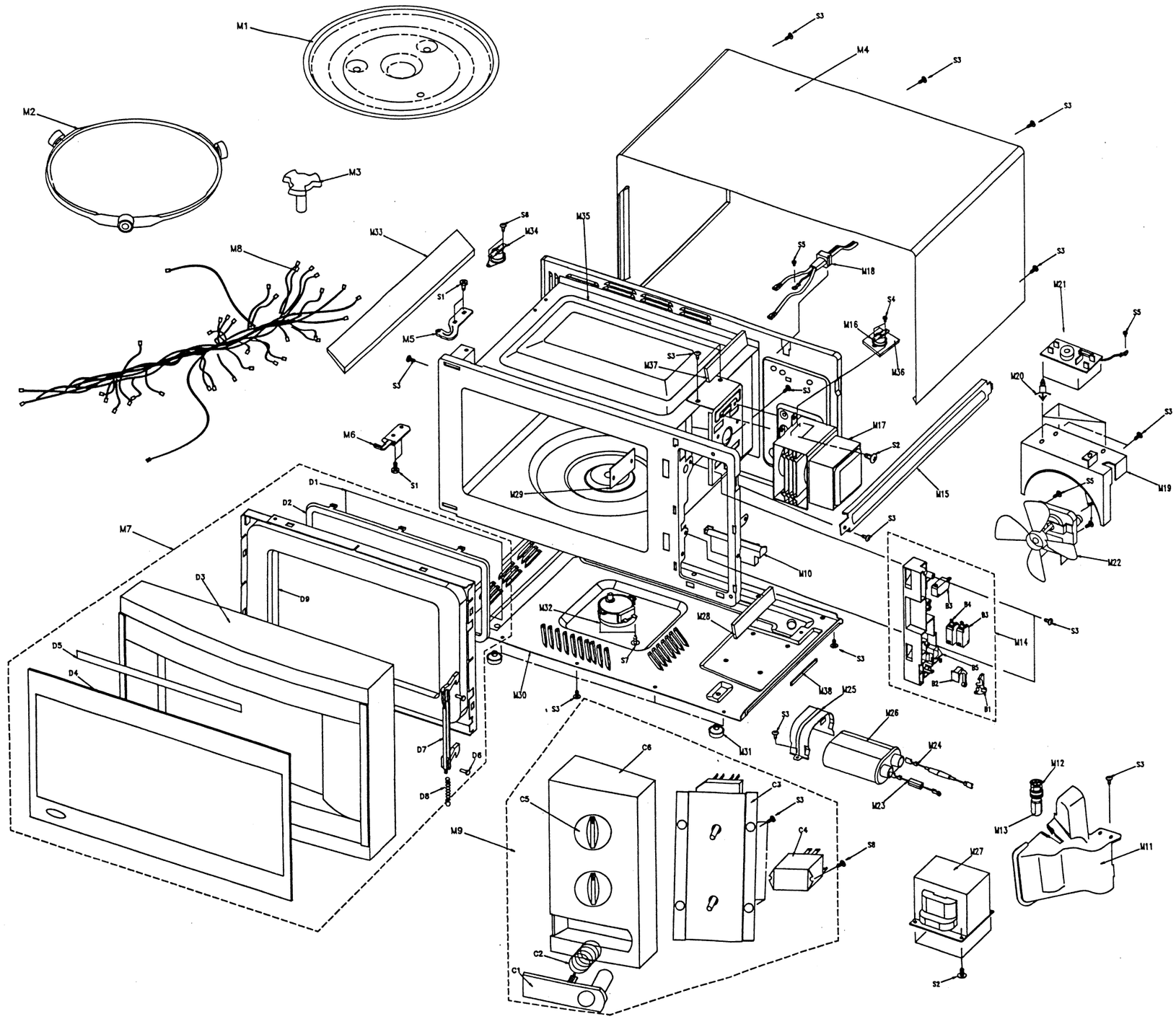
First of all operate the microwave oven by observing the correct operating procedures by time cooking in order to find the exact cause of any trouble.

13-1. Problems not Related to Defects of the Oven

	SYMPTOM	CAUSE	CORRECTIONS
1	Oven is dead. Fuse is OK. No display and no operation at all.	1. Open or loose lead wire harness 2. Open thermal cutout(Magnetron)	Check fan motor when thermal cutout is defective.
2	No operation at all. Fuse is blown.	1. Shorted lead wire harness 2. Defective primary latch switch(NOTE 1) 3. Defective monitor switch (NOTE1) 4. Shorted HVCapacitor 5. Shorted HVTransformer (NOTE2)	Check adjustment of primary, interlock monitor, secondary switch.
		NOTE 1: All of these switches must be replaced at the same time. (refer to adjustment instructions) NOTE 2: When HVTransformer is replaced, check diode and magnetron also.	
3	Timer starts countdown but no microwave oscillation. (No heat while oven lamp and fan motor turn on.)	1. Off-alignment of latch switches 2. Open or loose connection of high voltage circuit especially magnetron filament circuit NOTE: Large contact resistance will bring lower magnetron filament voltage and cause magnetron to lower output and/or intermittent oscillation. 3. Defective high voltage components H.V.Transformer H.V.Capacitor H.V.Diode, H.V.Fuse Magnetron 4. Open or loose wiring of power control switch 5. Defective primary latch switch	Adjust door and latch switches. Check high voltage component according to component test procedure and replace if it is defective.

	SYMPTOM	CAUSE	CORRECTIONS
4	Oven lamp and fan motor turn on	1. Misadjustment or loose wiring of primary latch switch 2. Defective primary latch switch	Adjust door and latch switches.
5	Microwave output is low. Oven takes longer time to cook food.	1. Decrease in power source voltage. 2. Open or loose wiring of magnetron filament circuit. (Intermittent oscillation)) 3. Aging change of magnetron	Consult electrician.
6	Loud buzzing noise can be heard.	1. Loose fan and fan motor 2. Loose screws on H.V.Transformer 3. Shorted H.V.Diode	Tighten screws of fan motor. Tighten screws of H.V.Transformer. Replace H.V.Diode.
7	Turntable motor does not rotate.	1. Open or loose wiring of turntable motor. 2. Defective turntable motor.	Replace turntable motor.
8	Oven stops operation during cooking	1. Open or loose wiring of primary interlock switch 2. Operation of thermal cutout(Magnetron)	Adjust door and latch switches.
9	Sparks	1. Metallic ware or cooking dishes touching on the oven wall. 2. Ceramic ware trimmed with gold or silver powder also causes sparks.	Educate your customer. Do not use any type of cookware with metallic trimming.
10	Uneven cooking	Uneven intensity of microwave due to its characteristics.	Wrap thinner parts of the food with aluminum foil. Use plastic wrap or cover with a lid. Stir once or twice while cooking foods such as soup, cocoa, or milk.
11	Clock noise from the turntable motor when it starts to operate.	The noise may result from the motor.	Replace turntable motor.

Exploded View M9235(CTW)



Parts List - Main Parts

Ref. No.	Parts No.	Description/Specification	Q'ty	Remarks
M 1	73602-0007-00	TRAY-COOKING;GLASS T6.0 PI318 1100G	1	
M 2	79362-0281-00	ASSY-GUIDE ROLLER;MW5630T	1	
M 3	71444-0016-00	COUPLER;PPS(ESS840) 5G BRN	1	
M 4	72061-0016-01	PANEL-OUTER;C/STEEL T0.6 W380.5 L1134 SC-WH-01-B	1	
M 5	73094-0036-01	HINGE-UPPER;SCP1 T3.0 W26 L76 WHT COAT MB245/MW653	1	
M 6	73094-0035-01	HINGE-LOWER;SCP1 T3.0 W24.7 L91.2 WHT COAT MB245/M	1	
M 7		ASSY DOOR;M9245(SAW) P/WHT	1	S. N. A
M 8	79202-0362-00	ASSY WIRE HARNESS-A;230V50HZ M9235 VDE	1	
M 9		ASSY CONTROL-BOX;230V50HZ M9235(SAW) P/WHT	1	S. N. A
M 10	71533-0015-00	LEVER-DOOR;POM(F20-01) NTR MW5630T	1	
M 11	73312-0125-00	COVER-AIR;NYLON#66 88G BLK	1	
M 12	76609-200-228	SOCKET-LAMP;E/14(22.225)	1	
M 13	B4158-0023	LAMP;T25 230V 25W E14 PHILIPS	1	
M 14		ASSY BODY LATCH;M8145G	1	S. N. A
M 15	73073-0034-00	SUPPORTER-MGT;SECC T0.6 W33.2 L317 MW5630T	1	
M 16	A3024-0077	SW-THERMO;NT-101NA(5XV)P 125V15A V 150/60 23.8MM 2	1	
M 17	77059-0018-00	MAGNETRON;OM75P(31)ESS	1	
M 18	79243-0072-03	ASSY POWER CORD;KKP-4819D/B206 250V10A L1500 1.0MM	1	
M 19	73312-0127-00	COVER-BLOWER;SECC T0.8 W139 L71	1	
M 20	76659-200-518	SUPPORT-P.C.B;DASS-T9N	3	
M 21	79179-0043-00	ASSY NOISE FILTER;250V50/60HZ SS-599B NO LEAD	1	
M 22	76822-0049-00	1MOTOR-FAN;AMM92-002AUEA 230V0.2A 2550RPM	1	
M 23	72169-219-108	DIODE-H.V;HVR-1X-32B-12	1	
M 24	79163-0196-00	ASSY-H.V.FUSE;THV060T-0800-0 60/70 SCREW	1	
M 25	73013-0194-00	BRACKET-H.V.C;SECC T0.8 W31 L125.8	1	
M 26	A1110-0027	C-OIL;CH-2101104B7N 115-J 2.1KVAC 3P °°°°°°°°	1	
M 27	77202-0081-00	TRANS-H.V;KH9245NTC M9245/MB245 230V 50HZ AC2230V	1	
M 28	76803-207-013	CUSHION-LAMP;P.U.T-FOAM T48 W10 L150 MB245	1	
M 29	73313-0101-00	COVER-WAVE GUIDE;PP(HONAM A353) 25G WHT	1	
M 30	72201-0037-00	BASE-PLATE;SGCC1-8 T0.8 W324.8 L515	1	
M 31	73004-0007-00	FOOT;PP(A353) BLK MW5630T	2	
M 32	76823-0048-00	MOTOR-SYNCHRONOUS;M2LJ24ZS52 220/240V50/60HZ M6235	1	
M 33	76803-207-014	CUSHION-LAMP;P.U.T-FOAM T40 W10 L340 MB245	1	
M 34	A3024-0009	SW-THERMO;NT-101NA(5XH)P 125V15A H 100/60 30MM	1	
M 35		ASSY CAVITY-C;0.9CU.FT MW5630T COATING WHT	1	S. N. A
M 36	70244-0023-00	INSULATION-T.C.O;T2.0 W34 L26 YEL	1	
M 37	76803-207-011	CUSHION-LAMP;P.U.T-FOAM T40 W10 L230 M9245	0	
M 38	70859-100-413	TAPE-DOUBLE FACE;DF 5712 T0.8X9W(TOYO-INK)	0	

S. N. A : Service Not Available

Parts List - Door Parts

Ref. No	Parts No.	Description / Specification	Q'ty	Remarks
D 1	74043-0052-00	DOOR-FILM;P.E-FILM MW5630T T0.15 W167 L283	1	
D 2	74041-0040-01	DOOR-C;PP(A353) WHT MW5630T	1	
D 3	74041-0072-00	DOOR-A;ABS(HR0370U) RA-WH-02-B 170G M9245	1	
D 4	74113-0031-02	SCREEN-DOOR(B);ACRYL T2.0 W247.9 L403.3 M9245	1	
D 5	A0071-0077	TAPE-DOUBLE FACE;ACRYL T0.26 W15 WHT 3M-A-25-9242	0	
D 6	70544-0010-00	PIN-HINGE;PI4 L17 MSWR10 M301TBC	2	
D 7	74042-0065-01	DOOR-KEY;POM(TC3005) WHT 13G M6245	1	
D 8	72724-0036-00	SPRING-KEY;ES HSW3 PI0.7 D7.0/L40 BULING	1	
D 9	79341-0017-04	ASSY DOOR-E;M9245 WHT COATING	1	

Parts List - Control Parts

Ref. No	Parts No.	Description / Specification	Q'ty	Remarks
C 1	74082-0082-00	BUTTON-PUSH;ABS(HR0370U) RA-WH-02-B 30G M9245	1	
C 2	72724-0026-00	SPRING-BUTTON;CS SWP PI0.7 D17/L25.8	1	
C 3	76222-0018-00	TIMER-ASSY;TMFF60MTK1 230V15MA	1	
C 4	A3068-0052	RELAY;CHP11-A240S 250V15A	1	
C 5	74083-0089-00	KNOB;ABS-HR0370U RA-WH-03-D 15G M9235	2	
C 6	74051-0051-00	CONTROL-PANEL(D);ABS-HR0370U RA-WH-02-B 180G M9235	1	

Parts List - Body Latch Parts

Ref. No	Parts No.	Description / Specification	Q'ty	Remarks
B 1	71533-0012-00	LEVER-SWITCH(B);POM 12G NTR MX245	1	
B 2	71533-0011-00	LEVER-SWITCH(A);POM 10G NTR MX245	1	
B 3	73579-203-207	SW-MICRO;VP533A-OF P,S(T85)	2	
B 4	73579-203-278	SW-MICRO;VP-531A-OF(T85)	1	
B 5	72681-0001-00	LATCH-BODY;POM 50G MX245	1	

Parts List - Standard Parts

Parts No.	Description / Specification	Q'ty	Remarks
77008-140-081	SCREW-PH;+M4X8 MSWR10 ZPC3	1	RELAY
77128-540-101	SCREW-TAP TH;2S-4*10 FR FZY	4	TIMER
70504-0002-00	SCREW-TAP TITE;TH + 3 M4 L10 SWR10 ZPC2 TOOTH	1	P-CORD
70504-0002-00	SCREW-TAP TITE;TH + 3 M4 L10 SWR10 ZPC2 TOOTH	1	NO-FIL
70504-0002-00	SCREW-TAP TITE;TH + 3 M4 L10 SWR10 ZPC2 TOOTH	3	MO/FAN
77094-211-410	BOLT-FLANGE;MSWR3 M5X10 FE,FZY	2	HI-UPP
77094-211-410	BOLT-FLANGE;MSWR3 M5X10 FE,FZY	2	HI-LOW
77128-540-101	SCREW-TAP TH;2S-4*10 FR FZY	2	CV/TCO
77128-540-101	SCREW-TAP TH;2S-4*10 FR FZY	1	TCO-MG
77154-202-910	WASHER-SCREW;2S-5X12	4	HVT
77154-202-910	WASHER-SCREW;2S-5X12	4	MGT
77154-203-820	SCREW-A;2S-4X12 FE FZY	2	C/BLOW
77154-203-820	SCREW-A;2S-4X12 FE FZY	2	BD-LAT
77154-203-820	SCREW-A;2S-4X12 FE FZY	5	PN/OUT
77154-203-820	SCREW-A;2S-4X12 FE FZY	2	B/MGT
77154-203-820	SCREW-A;2S-4X12 FE FZY	1	CV/AIR
77154-203-820	SCREW-A;2S-4X12 FE FZY	1	B/HI-U
77154-203-820	SCREW-A;2S-4X12 FE FZY	1	SU-MGT
77154-203-820	SCREW-A;2S-4X12 FE FZY	1	C/PANL
77154-203-820	SCREW-A;2S-4X12 FE FZY	1	B/HVC
77154-203-820	SCREW-A;2S-4X12 FE FZY	10	B-PLAT
A0103-0010	SCREW-ASSY TAPTITE;PH TC M4X8 SWRCH18A ZPC2 GLD WT	2	MO-DRV
77108-530-081	SCREW-TAP PH;2S-3X8 FE,FZY	2	TCO-MG